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WHAT IS CLAIMED

1. An isolated nucleic acid molecule that encodes the amino acid sequence depicted in Figure 1, and the allelic variants of the amino acid sequence.

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2. The isolated nucleic acid molecule of claim 1, wherein said nucleic acid molecule is operably linked to one or more expression control elements.

3. The isolated nucleic acid molecule of claim 1, wherein said nucleic acid molecule is included in a vector.

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4. An isolated nucleic acid molecule that encodes a member of the Bap-1 family of proteins, wherein said nucleic acid molecule hybridizes to a nucleic acid molecule of claim 1 under conditions of sufficient stringency to produce a clear signal.

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5. An isolated nucleic acid molecule that encodes a member of the Bap family of proteins, wherein said nucleic acid molecule hybridizes to a nucleic acid molecule of claim 1 under conditions of sufficient stringency to produce a clear signal.

6. A host transformed to contain the nucleic acid molecule of claim 1.

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7. The host of claim 6, wherein said host is selected from the group consisting of prokaryotic hosts and eukaryotic hosts.

8. A method for producing a Bap-1 protein comprising the step of culturing a host transformed with the nucleic acid molecule of claim 2 under conditions in which the Bap-1 protein is expressed.

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9. The method of claim 8, wherein said host is selected from the group consisting of prokaryotic hosts and eukaryotic hosts.

10. An isolated protein comprising the amino acid sequence depicted in Figure 1

11. An isolated antibody that binds to the protein of claim 10.

12. The antibody of claim 11 wherein said antibody is a monoclonal and polyclonal antibody.

13. A method for blocking the interaction of a protein selected from the group consisting of α IIb, Src kinase, and a β 3 integrin, with a Bap signaling complex comprising the step of contacting said protein with an agent that blocks the binding of the Bap protein or a Bap signaling complex to said protein.

14. The method of claim 13 wherein said agent blocks the binding of said protein to said Bap or said Bap signaling complex by selectively binding to the cytoplasmic domain of a β 3 integrin.

15. The method of claim 14 wherein said agent is a fragment of the Bap protein.

16. The method of claim 13 wherein said agent blocks the binding of said protein to said Bap or said Bap signaling complex by selectively binding to the Bap protein.

17. The method of claim 16 wherein said agent is an antibody that binds the Bap protein.

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18. The method of claim 13 wherein said blocking reduces cellular aggregation of an integrin expressing cell.

19 The method of claim 13 wherein said blocking reduces cellular attachment of an
5 integrin expressing cell.

20. The method of claim 13 wherein said blocking reduces cellular migration of an integrin expressing cell.

10 21. A method for reducing the severity of a pathological state mediated by integrin signaling comprising the step of contacting a $\beta 3$ integrin with an agent that blocks the binding of the Bap protein or a Bap signaling complex to said integrin.

15 22. The method of claim 21 wherein said pathological state is selected from the group consisting of thrombosis, inflammation and tumor metastasis.

23. A method for identifying agents that block the interaction of a protein selected from the group consisting of α IIb, Src kinase and a $\beta 3$ integrin with a Bap protein or Bap signaling complex comprising the steps of:

20 a) incubating a $\beta 3$ integrin, a $\beta 3$ subunit of said integrin, Src kinase, or α IIb with a Bap protein or a Bap signaling complex and an agent to be tested, and

b) determining whether said agent blocks the binding of the Bap protein or Bap complex to said $\beta 3$ integrin, said $\beta 3$ subunit, said Src kinase, or said α IIb.

25 24. The method of claim 23 wherein said Bap protein or said Bap signaling complex is contained in an extract of a cell.

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25. A method to assay for integrin mediated signaling comprising the step of determining whether a Bap protein is expressed.

26. The method of claim 25 further comprising the steps of;

- 5 a) preparing an extract of a cell, and
 b) examining the proteins of said cell extract to determine the presence of a Bap protein.

27. The method of claim 25 further comprising the steps of;

- 10 a) preparing an extract of a cell, and
 b) examining the mRNA of said cell extract to determine the presence of a Bap encoding mRNA.

28. A method to identify an integrin signaling complex comprising the steps of:

- 15 a) preparing an extract from a cell which expresses an integrin,
 b) incubating said extract with a Bap protein or a Bap/ β 3 integrin complex, and
 c) separating the Bap or Bap/ β 3 complex that bound said signaling complex from the mixture of step (b).

- 20 29. The method of claim 28 wherein said Bap protein or said Bap/ β 3 complex is immobilized on a solid support.